

RIGHTSIZING I-80: LOCAL CROSSROAD BRIDGE INCENTIVE PROGRAM

July 2018



INTERSTATE 80 PLANNING AND
ENVIRONMENTAL LINKAGES (PEL) STUDY

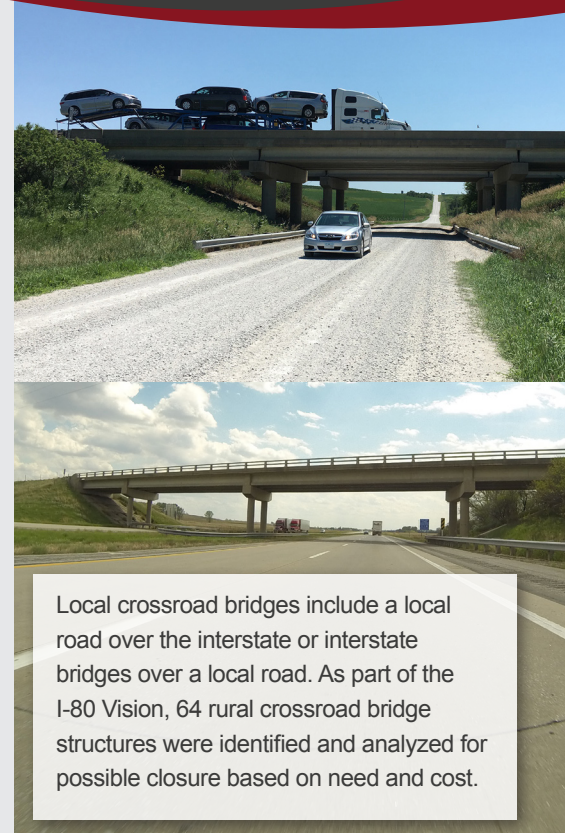
A lot has changed since I-80 was originally constructed in the 1960s across Iowa. Iowa's rural communities have grown and local travel patterns have become established. In many instances in rural Iowa, local I-80 bridge crossings are not functioning as originally conceived due to lower than expected traffic volumes. These crossings may not be serving their original need. As trusted stewards of Iowa's limited highway funding, the Iowa DOT is responsible for identifying the state's needs and spending its resources wisely. This means prioritizing funding and reshaping projects to bring the most overall value to Iowans. This process of rightsizing projects can result in changes to the traveling public. The new I-80 Vision provides the opportunity to right size the interstate, refine the improvements to save construction costs and deliver the best value to Iowans.



Vision for
Infrastructure
Investment



Evaluation
of Overhead
Structures



Local crossroad bridges include a local road over the interstate or interstate bridges over a local road. As part of the I-80 Vision, 64 rural crossroad bridge structures were identified and analyzed for possible closure based on need and cost.

Evaluation Methodology

Due to age and outdated standards, in general, the I-80 Vision requires the full reconstruction of the existing infrastructure. As much as possible, the existing roadway base and bridge structures will be reused. It is anticipated, however, that all crossroad bridges will necessitate full reconstruction with a new configuration, or for those rural low-volume crossings no longer needed, possible removal.

A total of 64 candidate low-volume I-80 crossroad bridge structures were identified across rural Iowa. Each of these crossing locations was analyzed based on its local traffic volume, out-of-direction travel if closed, and total replacement costs, including ongoing maintenance. Crossings with more than 1,000 vehicles per day were excluded. Each candidate crossing was scored and rated based on these evaluation criteria.

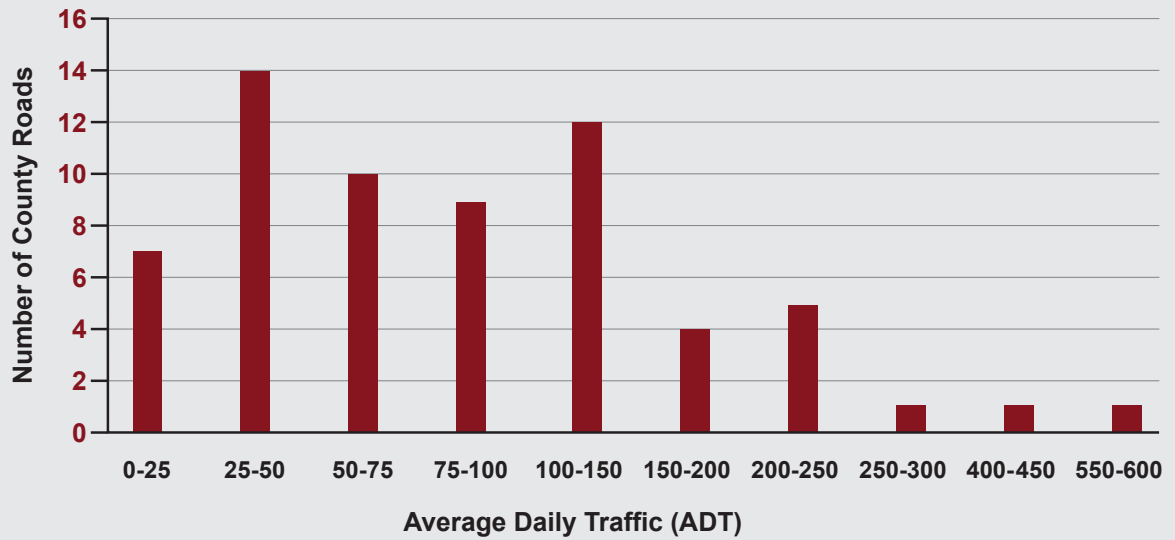
LOCAL CROSSROAD BRIDGE RATING CLASSIFICATIONS

Rating	Description	Recommendation
1	Highest Priority to Replace	The crossing is needed for regional access and connectivity and may cause hardship to the local travel if it is eliminated.
2	Moderate Priority to Replace	There is a moderate need for the crossing for regional access and connectivity and may cause moderate hardship to local travel if it is eliminated.
3	Average Priority to Replace	There is an average need for the crossing for regional access and connectivity and elimination may cause some hardship to local travel if it is eliminated.
4	Low Priority to Replace	The crossing will likely cause only minor hardship to access and connectivity if it is eliminated.
5	Lowest Priority to Replace	The crossing is only for localized traffic needs and hardship is limited.



Crossroad Bridge Evaluation Results

Rating	No. of Bridges
1	1
2	16
3	26
4	17
5	4
Total	64



The I-80 Vision: Local Crossroad Bridge Incentive Program

The I-80 Vision includes 47 existing bridges to be considered for closure – combined total of Rating 3, 4 and 5. These bridges, entailing 41 crossing locations, provide opportunities to right size the interstate improvements without unreasonable hardship to local travelers. In partnership with the respective county for each bridge crossing, we have developed an incentive program for the possible removal of these low-volume bridges as part of the Vision's implementation. For the eligible bridges, as listed in the Vision, and per agreement with the county, an incentive would be offered by means of credit to the county's balance of County Bridge Program funds for the construction, reconstruction or rehabilitation of other bridges on the county road system when these crossings are permanently removed. The amount of the incentive would be 100% of the cost of a typical replacement structure – \$1.5M per crossing location.

This incentive program, executed in coordination with the local agencies, provides an overall asset management approach to the Vision's implementation – bringing the highest value to Iowa. As the I-80 improvements are implemented, before or during the design process, each county will decide whether to participate in the program. If declined, the existing crossing will be maintained as part of the Vision. During the Vision's planning studies, each of the eligible crossing locations will be studied in more detail, considering each independently and collectively, to avoid unintended impacts if adjacent crossings were removed.

Benefits of Incentive Program:

- Asset management approach
- Benefits both the state and local agency
- Local agency decision